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Teacher Education

INDUSTRIAL-ARTS EDUCATION AT ILLINOIS STATE NORMAL UNIVERSITY

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TEACHER EDUCATION

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HISTORY OF INDUSTRIAL ARTS AT ILLINOIS STATE NORMAL UNIVERSITY

RAY M. STOMBAUGH*

Illinois State Normal University was among the first of the normal schools to introduce handwork courses into the school program, under the descriptive term of manual training. Handwork was first offered under the direction of William T. Bawden. Mr. Bawden had received his preparation in Teachers College, Columbia University, and had taught in Buffalo, New York, before coming to Normal.

The first classes met in rooms located on the ground floor in the northwest corner of the building now affectionately known as Old Main. The 1903-1904 *Catalog* does not indicate the shop equipment. However, in the 1904-1905 *Catalog* there is the following statement:

> The equipment includes twenty hand-machinery benches, each fitted with tools, patented rapid-acting head and tail vises, two twelve-foot benches, each fitted with six iron bench vises and other necessary appliances for venetian band and iron work.

Later in this *Catalog,* mention is made of a power-driven band saw and a wood lathe, that were to be installed by September 1, 1904.

The first course given in manual training offered:

1. Theory, a discussion of the function of manual training, the outlines of the course extending from the kindergarten to high school, including paper cutting and folding, weaving, basketwork, cardboard work, mechanical drawing, shopwork in wood and metal.
2. Practical work along these various lines to secure the requisite skill and manipulation.
3. Teaching classes in construction and manual training in the training school.

The 1904-1905 *Catalog* gives a better description of the offerings and lists three courses:

1. Benchwork in Wood
2. Construction for Primary Grades
3. Mechanical Drawing

The *Catalog* for the following year lists these three courses and adds another, Handwork for the Intermediate Grades. It appears that the offerings were becoming more specialized and that major or minor credits could be earned. The aim was to help the student prepare to teach manual training in connection with other studies. During the years following the introduction of manual training, many prospective

*Head of the Industrial Arts Department, Director of the Division of Industrial Arts Education.

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teachers from various curriculums took these courses. The greater number were students who expected to teach in the grades or high school and who were not specializing in manual training.

It was during the year 1907-1908 that plans were laid for the new Manual Arts Building, for which the 45th General Assembly had appropriated $100,000 with its equipment. It was during the same period that a two-year curriculum leading to a diploma for special teachers of manual training was outlined. The 1908-1909 *Catalog* describes the outline of this curriculum. Ten courses are listed in the 1907-1908 *Catalog*. These include three courses in furniture- and cabinet-making in addition to expanded programs in the offerings already stated. Mention also is made in this *Catalog* of the addition of a mortising machine to the shop equipment.

The manual training department was moved into the Manual Arts Building the following year. According to the 1909-1910 *Catalog*, more woodworking benches, a trimmer, and eight electrically driven woodworking machines were added to the equipment. A one-term course in Organization of Manual Training and a three-term course in Theory and Practice in Manual Training were included in the curriculum. Other changes took place during 1910. At that time Mr. Bawden accepted a position at the University of Illinois, and Adnah C. Newell took over his duties. Mr. Newell had been serving as supervisor of manual arts at Des Moines, Iowa, before coming to Illinois State Normal University.

Under the direction of Mr. Newell, the manual arts department continued to expand. A course, Woodturning and Pattern Making, was added in 1911-1912. The same year the plan of the courses in Furniture Making and Cabinet Making was changed from individual work to the factory plan of piecework. Under this plan, many pieces of furniture were designed and built for the University by students of the department. Machine Design was added to the offerings in mechanical drawing the same year and became a required course for students working for the manual training diploma.

Other courses were added to the curriculum through the years: Elementary Woodworking, 1912-1913; Architectural Drawing, 1913-1914; History of Manual Training, 1914-1915, and Furniture Designing and Construction in the same year. The course, Elementary Wood-Turning and Carpentry, was added in 1914-1915. Sheet Metal Drafting and Woods and Wood Finishing became a part of the offerings in 1923-1924. As an indication of an effort to increase the breadth of offerings in the field, Electrical Construction was added as a course in 1926-1927.

Merton J. Lyon was the first man to assist as a full-time teacher in the department. Mr. Lyon began his teaching in September, 1911, and remained as a teacher until the summer of 1916. Before this time Edward R. Tompkins had assisted Mr. Bawden during the 1909 and 1910 summer sessions. He also taught under Mr. Newell in the second summer term of 1911. The next man to take a position in the depart-

ment was Verne McDougle, who had received his preparation for teaching at the University of Wisconsin. Mr. McDougle started his affiliation with the University in September, 1916, and remained as a member of the teaching staff until he resigned in December, 1917, to enter war service. C. Vern Denman succeeded Mr. McDougle. Mr. Denman was a graduate of the manual arts course at Normal and came to the University from a teaching position in Decatur. Mr. Denman was followed by Alva W. Dragoo in September, 1920. Mr. Dragoo was also a graduate of the University and came to the department from a teaching position in Bloomington. He continued as a teacher in the department until his retirement in 1947. Other men who assisted Mr. Newell during the summer sessions between 1910 and 1928 were: Bristol E. Wing, 1915, 1918; Herbert A. McKean, 1916; Gerald R. Green, 1920, and Earl W. Ensinger, 1926.

An examination of the offerings in the department discloses a number of courses in the crafts and in elementary handwork areas. Many of these courses were taught by women in the department. In 1909-1910 Miss Marjorie Chamberlain became the first teacher of crafts. Miss Maud Goldsmith substituted for Miss Chamberlain during the later part of the year. Miss Clarinda Richards succeeded Miss Chamberlain in September, 1911, and she was followed by Miss Anna Elizabeth Swanson in the 1913-1914 school year. Two other women held regular teaching positions on the department staff. Miss Marjorie Nind started teaching in January, 1917. The following September, Miss Mary Bluebell Hill took over her work. The summer teaching staffs of the department were supplemented by several women teachers. Miss Laura Van Peppelendam taught one summer term during each of the years 1911 through 1917. Miss Irene Handlin taught classes during the first summer term of 1913, and Miss Frances R. Lindsay was a teacher in the first summer term of 1913 and 1914. Six courses in the department eventually were transferred to the art department. However, Miss Ethel Gladys Webb taught in the summer session of 1921.

The year 1928-1929 marks another period in the development of the industrial-arts department. A four-year curriculum in industrial arts leading to the degree Bachelor of Education was offered for the first time. A summary of listings in the *Catalog* shows twenty-six courses offered in seven areas as follows: two in auto mechanics, seven in drawing, one in electricity, two in metalwork, nine in woodworking, and four courses concerned with the history, methods, and organization problems of manual training and vocational education.

Two teachers, Kenyon S. Fletcher and Chester M. Hammerlund, were added to the teaching staff in September, 1929. Additional housing for manual arts courses in auto mechanics and metalwork was made available by utilizing a vacant room on the south side of the heating plant. Equipment for printing was purchased and was located on the ground floor in the southwest corner of the Manual Arts Building. Mr. Fletcher assumed responsibility for the operation of

the University Press and taught courses in printing and general metalwork. Mr. Hammerlund took over the responsibility for teaching classes in drafting and auto mechanics.

In the 1929-1930 *Catalog* the courses offered by the department were listed for the first time under the descriptive title of industrial arts. From 1903 to 1920, manual training was the term used to identify the department. Manual arts served as a descriptive title from 1920 to 1928. It is interesting to note that the building housing the different laboratories was called the Manual Arts Building as early as 1907 and continued to be known by that name until 1936. Since then, the designation Industrial Arts has been used to identify the building. In the 1928-1929 *Catalog*, the three different terms, manual training, manual arts, and industrial arts, were used to identify course titles. It is quite possible that in a transition period the content and the philosophy of the courses had changed even though the course titles remained the same.

Curriculum and course changes were evident in the years following the initiation of the four-year industrial-arts program. The 1931-1932 *Catalog* includes four courses in printing, a course called Farm Shop Work, and a course designated as Manual Activities for kindergarten and primary grade teachers. The *Catalog* of the following year shows the influence of the general shop movement. Beginning in the first semester of 1932-1933, students were rotated through orientation courses of the four areas of electricity, metalwork, printing, and woodworking. This pattern has been followed in varying degrees since that time. The purpose at the present time is very similar to the original one, that of acquainting students with the tools, materials, processes, skills, and basic knowledges in the several areas in order that students may better discover their interests and determine in which one or more they wish to specialize. Another evident purpose is to meet certification requirements for teaching general shop courses in the public schools. The same *Catalog* also mentions four new courses in metalwork. It is doubtful whether these courses were taught as indicated in the *Catalog* because of equipment limitations. In fact, the 1935-1936 *Catalog* shows only two offerings in this area. This would have been more in keeping with available facilities. The 1932-1933 *Catalog* also lists two new building courses in brick laying, masonry, and concrete construction. Evidently these courses were combined with carpentry in 1933-1934 to form a single course. Three additional courses were offered in the 1934-1935 *Catalog*. These were Drawing, Design, and Drafting; Materials and Methods of Teaching Industrial Arts; and Printing Appreciation.

Adnah C. Newell resigned in the summer of 1935 because of ill health. From the curriculum changes already mentioned, it is evident that Mr. Newell was not only closely following the changing philosophy of industrial-arts education but was also looking ahead to requirements for teaching industrial arts as situations were developing throughout Illinois. The writer took over the position of Mr. Newell

as director of the division in September, 1935. Thirty-two courses were then listed in the *Catalog*, including one in auto-mechanics, one in crafts, seven in drawing, three in educational theory, three in electricity, one in maintenance, one in metalwork, four in printing, and eight in woodwork. Numerous courses have been discontinued or added since that time in an attempt to meet the demand and the trend of industrial-arts programs in the public schools. Some course changes have come about as a result of utilization of housing facilities.

The program of orientation in industrial arts was changed in September, 1937, from rotation through several unit shops to an organization where similar experiences were obtained in a multiple activity or general shop, in which activities in the areas of crafts, electricity, metalwork, printing, and woodwork were carried on simultaneously under the direction of one teacher. The course in General Shop was discontinued in 1941 when some metalwork equipment became available through the National Youth Administration program and the space in the Heating Plant Shop was needed to house these facilities. The former industrial-arts orientation program was then restored but with the difference that the emphasis in the different laboratories was shifted in the direction of general area shops.

Illinois State Normal University was among the first of the teachers colleges to give a course in Driver Education. This course was first offered by the department in the summer session of 1938. The course was discontinued at the close of the 1943 summer session since training cars were not available on loan because of war conditions. The course had been organized on the basis of a complete program of classroom instruction and behind-the-wheel training. Driver education was reinstituted in the second semester of 1946-1947. Whereas the course had previously been offered only in summer sessions, Driver Education was also taught during the regular sessions because of the demand for teachers in this area as the Driver-Education program expanded in the high schools of Illinois.

A service course, Farm Shop Work, was started for the agriculture department in 1938-39. After three years, the course was transferred to agriculture when housing and staff became available to teach the course in that department. Furniture Upholstery was first offered in 1942-1943. This course has been a popular one in the Adult-Education program as well as an elective on the college level. It is not unusual to have the large proportion of the membership in the class coming from other departments outside of industrial arts. Principles of Safety Education was added to the department offerings in 1947-48. The course was taught by Howard Adams in the physical science department, but, upon his retirement, it was transferred to industrial arts as a parallel course with Driver Education. Many students enrolling in the class come from the elementary education and physical education departments as well as from industrial arts. Typography, a service course for students in journalism, was added to the offerings of the department in 1949-1950.

The impact of World War II upon the department had one thing in common with effect of World War I, that is, the enrollment in the department reached a low point of seven members. Several women took industrial-arts courses during this period, one of whom, Marjorie Reeves, completed a second field in industrial arts and upon graduation taught music and industrial arts in Chatsworth for a few years. Other women students who have had a first teaching field in art have completed a second teaching field in industrial arts. One graduate, Joyce Kinsey, taught elementary industrial arts in Aurora for a period of time. However, the department was not entirely dependent upon women students at this time to keep the teaching staff occupied. Engineering Drawing was required of all Navy V12 personnel and Descriptive Geometry was a required subject in the program of others. As a consequence, it became necessary to use the part-time services of William DeWeese and Leslie Isted in addition to the industrial-arts staff members to meet the demands of the Navy V12 program. Howard O. Reed became a member of the industrial-arts teaching staff in February, 1944, and devoted a portion of his time to teaching classes in Engineering Drawing. Mr. Reed had served as the director of industrial-arts programs in Bloomington and Lockport before coming to Illinois State Normal University.

The expansion of the metal work area received its original impetus with the beginning of the National Youth Administration on the campus. Additional impulse was given through increased facilities provided for the War Production Training Program. Most of the equipment later was donated to the University. Additional equipment was secured through surplus donations from the armed services. Since additional space was needed to house the equipment that had been acquired, a request was made to the Federal Housing Authority. Two buildings were moved from Camp Grant and were assembled as a unit west of the Industrial Arts Building. The first classes were offered in this Building beginning with the second semester of 1947-1948. It is the desire of the department members that additional items of equipment may be acquired in order to provide basic experiences in those areas which graduates may be called upon to teach.

The increasing demand for better prepared teachers of industrial arts was met to a degree with the initiation of departmental graduate offerings in the summer of 1948 with Dr. Ashbrook, Dr. Reed, and the writer as teachers in the graduate school. Dr. William D. Ashbrook, a former Normal student, came to the University in September, 1947, from Fairmount, West Virginia, State College. The program started with nine courses that had been approved by the Graduate Council and the Teachers College Board. Two courses have been added since that time to make a total of eleven graduate offerings.

Some other changes not previously indicated have been made in the teaching staff of the department. Mr. Fletcher was loaned to the Illinois State Board for Vocational Education on a part-time basis in 1941-1942 to serve as a state field supervisor for the National Youth

Administration Program. The next two years, he served full time with the state department in the Springfield Office, and resigned from the University at the close of the second year. In September, 1942, William V. White, who had been associated with the University Press since 1934, took over the printing classes taught by Mr. Fletcher. Mr. White continued to teach these classes until he was called into the Armed Services in January, 1944. In September, 1952, Mr. White began teaching the advanced printing classes.

Willard E. Fowler took over the duties of Mr. White in January, 1944, and finished out the school year. Max L. Honn joined the department staff in September, 1944, and began teaching printing classes in January, 1945. Mr. Honn had formerly been associated with the University through the Illinois Soldiers' and Sailors' Children's School. In September, 1949, two former graduates, Roger D. Blomgren and Robert G. Hammond became members of the staff, Mr. Blomgren serving on a part-time basis in connection with the activities of the University Press, and Mr. Hammond as supervising teacher in the University High School program. Charles B. Porter joined the teaching staff in September, 1950. Buford H. Bass has divided time between the industrial-arts program in Special Education and the athletic program of University High School. Both Mr. Porter and Mr. Bass received their Bachelor of Science in Education and Master of Science in Education Degrees from Illinois State Normal University. Perhaps mention should also be made that Dr. Louis V. Newkirk, who is now Director of Industrial Arts in the Chicago Public Schools, was a member of the 1932 summer session staff.

The latest additions to the industrial-arts curriculum have been the courses in Structural Design and Residential Wiring in 1951-1952, and General Shop, which was offered for the first time in September, 1952. Structural Design is a service course offered by the art department to develop a better appreciation and understanding of the elements that should enter into the design of articles used in the teaching of industrial arts. Residential Wiring was offered to round out the offerings in the electrical area in keeping with a policy of the department to offer sufficient courses in the areas taught in order that the prospective teacher may elect sufficient courses in an area to permit him to meet the minimum State Certification requirements to teach in a designated unit type shop. The organization and purposes of the course General Shop vary from the earlier course by the same descriptive title. Instead of being an orientation course as formerly, this offering is more of a practicum with emphasis upon the organization and teaching problems of the multiple activity shop.

At present, is is possible for a student to accumulate a minimum of ten semester hours in each of the five areas of drawing, electricity, metalwork, printing, and woodworking. This is in keeping with the desire to build a program that will provide not only breadth but also depth in order for a student to prepare himself to teach in unit area, general area, or multiple-activity organization types of school shops.

The comprehensive industrial-arts program, which was offered for the first time in September, 1951, was developed with the idea of presenting the qualified student with an opportunity for acquiring a richer background in his preparation for teaching.

As might be expected, in keeping with an expanding program there has been an attempt to improve facilities and bring them up-to-date. Although progress has been made, there are left some areas where the desirable goals yet seem somewhat remote. Especially is this true in the matter of housing, when even the present program and many new projections are dependent upon adequate housing. Returning veterans sent the enrollment in the department to a peak of one hundred and fourteen. At present, the enrollment is one hundred and one. It takes adequate housing and facilities along with effective teaching to prepare properly teachers who will be a credit to the University.

Many changes have taken place in programs for the preparation of teachers in the span of years since the inception of school shop work when the emphasis has moved from an end functioning in itself to emphasis upon the development of personal-social traits, integration, exploration, guidance, and consumer education as well as skills. An unbiased over-all perspective would appear to show that industrial arts as it has developed at Illinois State Normal University has apparently kept pace with educational philosophy.

CURRENT OFFERINGS IN INDUSTRIAL-ARTS EDUCATION ON THE UNDERGRADUATE LEVEL

C. M. HAMMERLUND*

Present-day offerings in industrial arts at Illinois State Normal University are the result of many factors. Primary among these are the demands of the public schools of Illinois. The teacher needs of the schools are made known to the University Placement Bureau each spring. An exact record of these needs is kept as to the number of calls for teachers in each subject-matter area offered in the department and as to combinations of industrial arts with other subject-matter fields. A second determinant is the certification standards set up by the State Board for Vocational Education in its Industrial Arts Division. This factor is more concerned with quantity (semester hours) taken than with the various subject-matter areas offered. Professional contacts and abilities of the industrial-arts department faculty also enter into the picture.

Illinois State Normal University has a prescribed curriculum of study for all students preparing to teach in junior high and secondary schools. The core of this curriculum consists of from sixty-eight to seventy-two semester hours in general (cultural) and professional education, including student teaching and its companion, special methods. This core is adhered to with few exceptions, regardless of subject-matter fields elected by the student according to his major and minor interests. For the average student there remain about sixty semester hours to be divided between his choice of major and minor teaching fields.

Students electing to take a major or minor teaching field in industrial arts may take courses in five areas: drafting, woodwork, metalwork, electricity, and printing. Further work may be taken from six other individual courses not falling in any of the other areas. In order to enable the student to meet the certification standards set up by the State Board for Vocational Education—eight to ten semester hours to teach a subject-matter area as a unit shop and five semester hours as an area in a general shop setup—the industrial-arts department currently offers the following courses in the various areas:

Drafting—15 semester hours

111. Engineering Drawing (3)
113. Descriptive Developmental Drafting (3)
114. Machine Drawing (2)
211. Architectural Drawing (4)
212. Machine Design (3)

*Assistant Professor of Industrial Arts

Woodwork—17 semester hours

121. General Woodworking (3)
122. Furniture Upholstery and Finishing (3)
221. Carpentry and Building Construction (3)
223. Woodworking (3)
224. Wood and Metal Finishing (2)
226. Cabinet and Furniture Construction (3)

Metalwork—14 semester hours

131. General Metalwork (2)
132. General Metalwork (3)
231. Machine Shop Practice (3)
232. Sheetmetal and Welding (3)
232. Machine Shop Practice (3)

Electricity—10 semester hours

141. Applied Electricity (3)
142. Residential Wiring (2)
241. Electrical Appliance Repair (3)
242. Introduction to Radio Servicing (2)

Printing—10 semester hours

151. Elementary Graphic Arts (3)
152. Graphic Arts (2)
251. Advanced Typography (3)
252. Typography (Linotype) (2)

Others—17 semester hours

108. Structural Design (2)
127. Crafts (2)
153. Typography for Journalists (2)
200. General Shop (3)
262. Problems in Industrial Arts (2)
267. Driver Education (3)
269. Principles of Safety Education (3)

All courses are not offered in any semester but every effort is made to give comprehensive majors and majors the opportunity to elect courses to meet certification requirements in areas of interest during their junior or senior years.

The industrial-arts department offers programs of three types. The first is the comprehensive major, where all electives are concentrated on industrial arts to the exclusion of any minor subject-matter field. The second is the industrial-arts major, where about sixty per cent of electives are taken in industrial arts, permitting a minor to be

taken in another subject-matter field. The third is the industrial arts minor, with major preparation in another subject-matter field. The comprehensive major will add to his curriculum core at least sixty semester hours in industrial arts. Eight of these hours will be in drafting; six in woodwork; five each in metalwork, electricity, and printing; and two in the course, Problems in Industrial Arts. The remainder of the sixty hours may be chosen in industrial-arts areas of special interest to the student with the requirement of eight semester hours in four areas. The major adds to his curriculum core a total of thirty-seven semester hours in industrial arts. He must have six to eight hours in drafting, three hours in each of the other four areas, and the course, Problems in Industrial Arts. The remainder of the thirty-seven semester hours must be elected so as to provide eight semester hours in each of three areas. The minor in industrial arts must complete twenty-four semester hours, fourteen of which are required in four areas. The remainder must be elected so as to provide at least eight semester hours in one of the five areas.

The following chart indicates courses required in the three programs, as well as elective courses available. Because of space limitation courses are indicated by departmental number. Included in the category designated as others are service courses offered to students in the departments of art, English, and home economics, specifically, and to any other student who may elect them.

The Illinois State Normal University and its department of industrial arts can well be proud of its many graduates. A large number of these men are now college teachers of industrial arts, and many others have outstanding records as secondary-school teachers. The staff members point to these men and their accomplishments as indicative that the department has influenced students to continued improvement in their education in their chosen field.

REQUIRED AND ELECTIVE COURSES OPEN TO INDUSTRIAL-ARTS MAJORS, MINORS, AND OTHER STUDENTS

	Drafting		Woodwork		Metalwork		Electricity		Printing		Others	
	Required	Elective	Required	Elective	Required	Elective	Required	Elective	Required	Elective	Required	Elective
Comprehensive Majors (60 semester hours)	111 113 114	211 212	121 223	122 221 224 **226**	131 132	231 232 233	141 142	241 242	151 152	251 252	108 127 262	200 267 269
Majors in Industrial Arts (37 semester hours)	111 113* 114*	211 212	121	122 221 223 224 226	132	131 231 232 233	141	142 241 242	151	152 251 252	108‡ 127‡ 262	223§ 131§ 142§ 152§
Minors in Industrial Arts (24 semester hours)	111 113* 114*	211 212	121	122 221 223 224 226	132	131 231 232 233	141	142 241 242		151 152 251 252	262	
Other Students		111		121 122		131 132		141		151 153		108 127 267 269

* One of these courses is required.
‡ One of these courses is required.
§ Three of four of these courses are required.

STUDENT TEACHING IN INDUSTRIAL ARTS AT ILLINOIS STATE NORMAL UNIVERSITY

ROBERT G. HAMMOND*

The apex of the preparation for teaching in the field of industrial arts at Illinois State Normal University is reached in the course known as Student Teaching and Special Methods. Most of the student teachers have completed only three years of University work. A large part of the first two years' work has been of a general nature. An average student as he begins his student teaching will have had between twenty-two and thirty semester hours in industrial arts, three hours of educational psychology, and about eight hours of professional education courses. It naturally follows then that student teachers are not fully prepared in subject matter, pupil understanding, and teaching techniques.

Student teaching, therefore, must serve a dual function in the professional training of teachers. First, it must provide an opportunity for the student to augment his already acquired professional knowledge, insight, and skills. Second and more important, it must provide the student an opportunity to apply this knowledge in teaching situations under the friendly, cooperative, and constructive guidance of a critic or supervising teacher.

As is true in other special fields of education, the industrial-arts curriculum has many specific areas of preparation—wood, metal, drafting, graphic arts, electricity, driver education and the crafts. This diversity of areas makes it very important that a student teacher be assigned to a class and to a supervising teacher that will offer him the greatest possible challenge and yet assure him the opportunity to succeed. Assignments are made by the department head in terms of past area specialization, personalities, present needs, and future desired experiences.

Illinois State Normal University has two basic plans for student teaching in use ot the present time. The head of the industrial-arts department makes use of both of these in assigning students to their teaching duties. The first of these, called full-time teaching, assigns a student to a public school for a period of nine weeks. During this time he acts very much as a regularly employed teacher in the school, devoting his full time to student teaching and eventually engaging in most of the activities of the school and community as a regular teacher would do. The student teacher usually has experiences in two teaching areas, under two or more supervising teachers. He is introduced gradually to his new responsibilities by his supervising

* Assistant Professor of Industrial Arts

s Three or four of these courses are required.

teachers and the public-school administrator and his assistants, with the coordination of the Director of Off-Campus Student Teaching of the University. He is assigned to four classes per day with other hours being devoted to such activities as planned observations, supervision of extra-curricular activities, direction of noon-hour activities, participating in teacher committee work, planning of assembly programs, and attendance at faculty meetings.

This nine-weeks' period of full-time student teaching is either preceded or followed by nine weeks of professional course work on the campus. These courses include School and Community Relations, Philosophy of Education, and Audio-Visual Education. Among the many excellent school systems of Illinois that have cooperated with the industrial-arts department of Illinois State Normal University are those of Bloomington, Blue Island, Chenoa, Joliet, LaSalle-Peru, Lexington, Minonk-Dana, Pekin, Thornton Fractional of Calumet City, Thornton of Harvey, Rockford, and Rock Falls.

The second plan for student teaching at the University involves participation in two classes, usually one each semester, for one period every day throughout the eighteen weeks of the semester. The amount of time expended by each student depends upon such factors as the course, the conditions surrounding the assignment, and the supervising teacher to whom the student is assigned. A student normally carries nine to eleven hours of additional University work along with the student-teaching assignment each semester. Even though conflicts do arise as a result, it is generally understood that student-teaching responsibilities carry first priority.

In general, the same procedure is followed for both plans. A student is assigned by the department to a class where there is great likelihood that both the student and the class will benefit from the association. He will be told to report to the supervising teacher prior to the time he is to be present for duty with the class. This opportunity gives him a chance to question the supervising teacher about the nature of the class, its organization, pupil assignments, and pupil participation. If the class is in session, it will probably be suggested that the prospective teacher make some visits to the class. He will be informed as to the time and place of reporting for student teaching.

From the time of his assignment, every student teacher looks forward, with anticipation or trepidation, to the time when he will have complete charge of the class. Just when that time will come depends upon the length of time it takes the student teacher to gain strength and confidence to carry on by himself. Classes vary as student teachers vary greatly in their ability to assume teaching responsibilities. It is the problem of the individual supervising teacher to determine when he can delegate responsibility to the student teacher. The supervising teacher must see to it that the best interests of both the class and the student teacher are served in the transfer of responsibility from the shoulders of the supervising teacher to those of the new teacher.

Observation of the technique of the supervising teacher, participation in the class, work with individuals, plans for teaching, actual teaching, and a gradually increasing amount of leadership in the class activities, plus frequent consultations with the supervising teacher, will mean professional growth for the neophyte teacher, with a resultant end product that is a credit to the individual, the school, and the teaching profession.

Student teachers following the eighteen weeks' plan have been given industrial-arts assignments in such schools as the Bloomington Junior and Senior High Schools, Normal Community Unit Schools, University High School, Thomas Metcalf Elementary School, and the David Felmley Junior High School of the Illinois Soldiers' and Sailors' Children's School.

Most educators agree that the full-time assignment has certain advantages over the eighteen weeks' plan with teaching for one period each day. These advantages center largely upon the fact that the student is able to engage in a larger number of school and community activities that are not available in a campus-school situation. He is also able to observe in greater detail other teachers and teaching situations. His experience tends to be more realistic in situations where the pupils are not so "student-teacher wise." However, transfers, irregular schedules, and campus needs will make it difficult to abolish the eighteen weeks' plan. If the plan is ever abolished, an added responsibility will be placed upon each student to plan his tentative program well in advance.

Under either of the previously outlined plans the industrial-arts student may gain his experience on the elementary level, or on the junior or senior high-school level. He may do his student teaching in a comprehensive general shop, a general-area shop, or a unit shop, depending upon the assignment in which he is placed. It is the policy of the department to place those students who are qualified by past experience to teach in a unit shop in that type of shop. A student with a breadth of experience but with little depth would probably stand a greater chance of success in a general-shop situation than in a unit shop, where a greater detail of subject-matter knowledge is required. It is necessary for each student to meet the state certification requirements for the type of shop in which he is teaching. This factor must then be taken into consideration by the student in making out his programs.

The department readily recognizes that a thoroughly qualified and competent teacher cannot be developed in nine weeks or in eighteen weeks. The important fact is that experiences are provided for the student that will develop the desirable skills, professional interests, attitudes, and ideals necessary for him to undertake and do independent teaching.

THE GRADUATE PROGRAM IN INDUSTRIAL ARTS

HOWARD O. REED*

Although graduate work was first offered at Illinois State Normal University during the summer session of 1944, graduate courses in industrial arts were offered for the first time during the 1949 summer session.

The graduate faculty in industrial-arts education consists of three members, all of whom have earned doctor's degrees. Each member of the graduate faculty has also had several years of public-school teaching experience, teacher-training experience, and practical experience in industry. All hold membership in professional organizations and have participated in the programs of these and other organizations.

Each student admitted to graduate study works under the direction of an advisory committee. The chairman of the advisory committee for those majoring in industrial-arts education is appointed by the head of the industrial-arts department. The second member of a student's advisory committee is appointed by the chairman of the graduate council upon nomination of a member from the department of education and psychology by the chairman of the advisory committee and the student. Among the responsibilities of a student's advisory committee are: advising the student with reference to elective courses, recommending the student for admission to candidacy for the degree, directing theses and research projects, and prescribing and conducting final examinations.

Requirements for admission to courses for graduate credit are the same for the industrial-arts department as for other departments of the University. Since these requirements along with other important information regarding the graduate program, are set forth in the *Graduate School Bulletin,* they are not repeated in this article. Application blanks for admission to graduate work as well as the *Graduate School Bulletin* may be secured from the Director of Admissions. All applications are passed on by an Admissions Committee, consisting of the Director of Admissions, the Dean of the Graduate School, and the Head of the Industrial Arts Department.

One academic year (thirty-two semester hours) or the equivalent in summer sessions is the minimum residence credit. No work may be transferred for graduate credit, except for those holding a Bachelor's degree from Illinois State Normal University. Local graduates may present a maximum of eight semester hours of approved credit from

* Associat Professor of Industrial Arts

another college or university. An average grade of "B" must be earned in all graduate courses taken.

Those taking a major in industrial-arts education ordinarily enroll in the curriculum for secondary-school teachers. Students in this curriculum are required to take a minimum of twelve semester hours in education and psychology including Guidance, Introduction to Research, and Seminar in Curriculum Construction. All candidates for the graduate degree in industrial-arts education are also required to write a thesis or a report on a research project under the direction of the advisory committee. Candidates are specifically advised to take Foundations in Industrial Education and Seminar in Industrial Education, plus enough electives in industrial-arts education courses to make a total of twenty semester hours in the field.

Graduate offerings in industrial-arts education, in addition to the thesis, consist of the following:

Contemporary Industrial Arts Education—A two-semester hour course dealing with a study of the prominent leaders and trends in industrial-arts education.

Industrial Arts in the Elementary School—A two-semester hour course concerned with educational principles underlying industrial arts with the application of those principles in the elementary activity program.

Principles of General Shop Organization—A two-semester hour course dealing with the problems that confront the teacher of the multi-activity type of shop.

Materials and Methods of Teaching Safety—A two-semester hour course providing experiences for industrial-arts teachers to aid them in providing safety measures and developing attitudes appropriate for schools, recreation, and traffic.

Foundations of Industrial Education—A three-semester hour course concerned with the movements and philosophies which have influenced the development of industrial education.

Evaluation Techniques in Industrial Education—A three-semester hour course dealing with the construction and use of devices to be employed in the appraisal of student abilities and achievement, and of one's program of teaching. Commercially produced testing devices are also studied.

Seminar in Industrial Arts—A two-semester hour course concerned with a critical examination of research studies in the field, consideration of the selection of a suitable problem for a thesis, and methods to be used for the solution of the problems under consideration.

Special Projects in Industrial Arts—A three-semester hour course concerned with advanced work within subject-matter areas of the student's choice in which he has a sufficient background because of training or experience. Study is centered upon project selection, individual construction, and mass production techniques in school and in industry. Students are to visit selected industries in connection with this course.

Improvement of Instruction in Industrial Arts—A three-semester hour course given over to a study of objectives, content, and techniques for the enhancement of the teaching of industrial arts.

Occupational and Job Analysis—A two-semester hour course dealing with the methods for obtaining, describing, classifying, and analyzing occupational information for instructional purposes.

Organization and Administration of Industrial Education—A three-semester hour course concerned with a study of federal aid for vocational education, day industrial classes, part-time schools, evening schools, apprenticeship programs, and vocational rehabilitation programs.

It can be seen from the information just presented that the fifth year of work in industrial-arts education at Illinois State Normal University is an attempt to develop master teachers of industrial arts. Of the fourteen men who have obtained the Master's degree from the University, eight are now teaching in secondary schools; three are doing college teaching; one is an elementary school principal; one is in the military service, and one is awaiting induction into the armed services.

INDUSTRIAL ARTS IN SPECIAL EDUCATION

WILLIAM D. ASHBROOK*

The general aims of education are the same for all children, regardless of capacities. The general aim for the handicapped child is to develop and establish in him, as far as his capacities will permit, the knowledge and information, attitudes and appreciations, habits and skills, that will enable him to find his place in society and to develop himself and society toward higher ends.

Many types of handicapped persons require special education: the orthopedic, the partially sighted, the hard of hearing or deaf, the cerebral palsied, and the slow learner or mentally retarded. Since any impairment in the integrity of the physical receptors results in a slower learning progress and a retardation in grade placement, the mentally retarded is the group with which the average industrial-arts teacher is most familiar and most concerned. Since industrial arts is an integral part of general education, its aims must parallel those of general education. As a means of determining how industrial arts can make its greatest contribution, it is necessary to reflect upon the aims of general education in servicing this area.

Any program for the handicapped should consider the following:

1. What becomes of these children after they leave school?
2. Do they have employable assests?
3. What types of employment do they enter?
4. What should be the main objectives of the program in order to help them to the fullest extent?
5. How can industrial arts contribute to the attainment of these objectives?

At Colorado State College a follow-up study of the mentally retarded group after they had left school revealed that they do have employable assents since ninety per cent were able to find and hold jobs. They earned salaries above those paid for common labor. They do not become hopeless charity cases. They marry, rear families, pay taxes, and become voting citizens .The handicaps that caused major concern in the classroom are not so apparent after maturity. A perspective of this type is helpful in working with them in the class room.

The types of employment entered upon are varied although they may be classified as semi-skilled and unskilled. The requirements for success in these jobs are relatively simple: physical health, the ability to take orders and carry them out, desirable work attitudes, knowledge of simple arithmetic, desirable citizenship characteristics, presentable

* Associate Professor of Industrial Arts

appearance, dexterity of movement, ability to get along with people, and some specific training on the job.

Nearly four hundred employers involving over four thousand jobs were unanimous in desiring the following characteristics of their employees:

1. Health and physical soundness
2. Ethical character
3. Loyalty
4. Mental honesty
5. Good temper
6. Cooperative attitude
7. Dependability
8. Control of emotion

No mention was made of trade training. Vocational education does not enter into the problem of equipping this group for life. Particular skills essential to their employment are usually gained on the job since they are simple in nature and usually require only short training periods. Industrial arts is best fitted to make the contributions necessary for successful employment. A program to help the mentally-retarded group should have for its objectives: health, the fundamental processes, citizenship and character training, and shop experiences.

The major emphasis in shop experiences should not be placed upon specific types of training but upon the development of general information and general skills. As plans are made for the industrial-arts program it is well to keep in mind the outstanding characteristics of the slow-learning child, which form the basis for differentiation for the program.

1. He learns through actual situations instead of through abstract ideas.
2. Improvement in skills and morals takes place through the formation of specific habits.
3. He generalizes or applies principles only to situations within his training or experience.
4. He is better able to execute than to plan.
5. His interest is aroused by tangible things within his experience.
6. He comprehends best what is closely related to his training and experience.
7. He is satisfied with simple tasks; he enjoys repetition.
8. He grows through constructive criticism offered in a friendly spirit.
9. He thinks largely in terms of himself.

Pedagogical principles are the same for the slow-learning child as for the normal child, but the application of these principles should meet the needs of the child. The typical mental character of the slow-learning child is used as the psychological basis for methods. The instructor should interpret the child's intelligence in terms of the latter's mental age and his rate of growth in terms of his intelligence quotient. A report of this type cannot indicate specific knowledge or

skills to be taught. Since the needs are of a general nature, the program should be designed to impart as much general knowledge and general skill as is possible to be attained by this type of pupil.

The industrial-arts program for the special groups needs to vary but little from that offered in the normal classes. The modifications necessary will be in degree rather than in kind. Keeping in mind that the slow learner will have accumulated two or more years of retardation in grade placement by the time he has reached junior-high-school age, and also that there is a tendency for him to leave school when the upper-age level of compulsory school attendance is reached, it can be seen that he will not progress beyond the type of shop experience found on the junior-high-school level. This fact will eliminate from consideration the more technical shop experiences of the senior high school and makes it necessary to broaden the experiences in the junior high school. Because of his lack of ability to plan, his short attention span, and his acceptance of repetition, the craft-activities program well fits his experience needs. The projects should be kept small and relatively simple, requiring only a short time to complete. This arrangement will reduce commodity costs and minimize loss from spoiled materials. The general shop seems better adapted to fit the need of this group than the unit-type shop.

Methods of teaching, too, will need to be modified to fit the characteristics of this group. For them, learning is a complicated process for which no one method may be considered entirely complete or satisfactory. Progress in industrial arts may be thought of as being on different levels. There is first the level of sensori-motor learning, where pupils are getting the feel of the tools, where basic tool operations are mastered, and where habits of skill are formed. The demonstration method may be used to advantage here if the class is small and all can see just what is being demonstrated. Usually one demonstration will not suffice. The more illustrative and visual aids are used, the better the teaching will be. Lantern slides, films, photographs, models, and diagrams are all essential for successful teaching.

A slightly different level is that in which the pupil acquires facts and learns to associate symbols with appropriate meanings. Here lectures and discussions may be used, although for the mentally-retarded group assigned readings in texts and information sheets should be omitted since this group does not readily get ideas from print.

The highest level of learning, in which the boy is increasingly dependent upon his own resources and which is exemplified by the project or problem-solving method, will seldom be reached by the slow learner. He is better able to execute than to plan. In most instances, templates will need to be used; even with this method there will be some who will need help in tracing around a template. On all of these levels, consideration must continually be given to the development of

attitudes and social growth. Social skills must be acquired if this boy is to be able to function in society and be able to get along in the industrial world.

Homogeneous grouping has been attempted for the slow-learning pupils, but for the industrial-arts area this segregation seems neither necessary nor desirable. There is apparently little relationship between mental ability and the ability to acquire a skill. Chronological age and physical maturation are sufficient to permit most pupils to work satisfactorily with those of their own age groups. Segregation merely multiplies the problems inherent in teaching this type of learner.

Saftey practices in the shop may follow those of the regular shop classes. Observation indicates that this group is not particularly accident prone and has no more than a normal percentage of accidents. These pupils may be permitted to use the less dangerous tools with excellent results. As a group, they do not attempt operations for which they have not received instruction. Their imagination does not lead them into trouble when operating power tool equipment. The safety record in the shops seems to reflect both the type of safety instruction given and the individual teacher rather than the personnel of classes involved.

Industrial-arts teachers have long been called upon to help to provide educational experiences for the handicapped child. This child is no stranger to the shop program. The shop teacher of today welcomes the opportunity to help these pupils who have difficulty in keeping pace with their classmates. Few teachers, however, have been called upon to teach segregated sections of the handicapped. For successful teaching in this area it is necessary that the instructor familiarize himself with the learning characteristics peculiar to this child. He must acquire a philosophy of education and acquaint himself with desirable teaching methods. He must know the type of shop experiences that will best develop the child. He must realize that progress will be slow. Infinite patience and a sympathetic understanding are necessary for the mental health of both the instructor and the child. Such knowledge and understanding will help to eliminate the feeling of frustration that nearly always comes to those who work in this area for the first time. If the teacher of the slow learner will recognize the handicaps as they exist, accept the child for what he is, take him on the level where he is found, and develop him as far as his abilities will permit, he need not be too apprehensive of the final outcome. Maturity will do much for this child. When this type of child is observed a few years later, the shop teacher can well take pride in the growth that industrial arts has helped achieve for those given training in the area of special education.

DRIVER EDUCATION AND SAFETY EDUCATION

ROGER D. BLOMGREN*

Superintendents, principals, classroom teachers, and school board members of Illinois are coming more and more to recognize the need for trained teachers to carry into the classroom to our boys and girls effective instruction in all types of safety education.

This is the first sentence of a special *Bulletin* distributed by Illinois State Normal University announcing the safety education program for the summer session in 1938. Even though fourteen years have passed since this beginning of a safety-education program, the same thought would be needed to introduce such a *Bulletin* today.

A national accident-fatality toll of 93,000 in a single year is almost unbelievable. When it is recalled that in the same year 9,100,000 persons were injured, that of this group 340,000 were permanently impaired, and that there was an $8,000,000,000 financial cost for these accidental fatalities and injuries, the staggering annual loss becomes too great to be overlooked. Since accidents are the fourth most common cause of death and the leading cause of death among persons one to thirty-five years old, it is important that teachers become aware of the national accident problems and consider means of carrying out an accident-prevention program with students under their direction.

Possibly the greatest need for an accident-prevention program is in the traffic-education and safety field. Man has made amazing strides in putting wheels under himself. In 1895, there were four automobiles on the roads of America; today, there are close to 52,000,000. The monthly output of commercial and pleasure vehicles is close to 500,000. Man, too, has made significant strides in increasing the speed of those wheels. In 1895, the automobile obtained a top speed of fifteen miles per hour; now, the yearly average speed of all automobiles is considered to be slightly more than thirty miles per hour with unbelievable top speeds. These gains in speed of production and speed of movement have been far greater than expected.

Stories of the mechanical improvements of the automobile have filled books. Stories of petroleum, safety glass, low-pressure tires, sealed-beam lights are milestones in the automobile's development. Although these mechanical milestones are remembered and accepted by most, the effect of the automobile on the American family is sometimes overlooked. The automobile has brought farms and cities closer together; it has created jobs; it has made possible consolidated schools; it has helped law enforcement; but, at the same time it has created many problems. The most painful problem is the death and destruction

* Instructor in Industrial Arts

brought about by the use of the automobile. The nation was shocked this last spring when it was forced to realize that the one-millionth traffic fatality had actually occurred.

It is a known fact that the age group of from fifteen to twenty-four has the worst accident record for miles traveled of any age group. This knowledge should strengthen the thought that a great deal of work must be done with this group both at home and in school. The President's Highway Safety Conference concludes that the best hope for the solution of the mounting traffic problem is the successful establishment of correct habits and skills in the minds of the thirty million young people in the schools.

Beginning in 1933, when the first high-school course in driver education was given by Amos E. Neyhart, the movement toward sound driver instruction for the high-school driver has spread throughout the country. Nearly 9,000 high schools offered driver education during the 1950-51 school year. An estimated 750,000 youngsters took advantage of the courses. However, there are still almost 11,600 high schools and an additional 750,000 students who need the opportunity for such training. It must be remembered that the schools have the children for only a few hours each day for nine or ten months. As a result, safety education must be carried on not only at school but also at home, on the beach, on the playground, and wherever the child may be.

The need for organized safety programs was first recognized in the 1920's. The first full-time course in traffic engineering was established in 1924. The first teacher-training course in driver education was conducted in the summer of 1936. In the summer of 1938, Illinois State Normal University presented a safety-education program for teachers. According to reports received this year by the Higher Education Committee of the National Safety Council, 215 colleges in 48 states are now offering 431 courses in safety education, of which 204 are specifically driver education. This report from the National Safety Council would lead one to believe that the colleges are increasing their offerings to meet the demands of educators and the public for increased safety education for the public-school teacher. Even with these increased offerings it appears that the supply of qualified safety teachers still lags behind the demand.

Today the industrial-arts department of Illinois State Normal University offers teachers three courses in safety education: Principles of Safety Education, Materials and Methods of Teaching Safety, and Driver Education. Safety instruction for teachers is not limited to these courses alone. Each shop—wood, metal, printing—integrates a safety program peculiar to the shop with regular instruction of related material.

The course, Principles of Safety Education, deals with the general problems of school safety, home and farm safety, child accident problems, fire prevention, fire protection, street and highway safety, recreation safety, and co-curricular safety activities. Among the other units

considered are accident reporting, teacher liability, and plans for and evaluation of the school safety program.

The course, Materials and Methods of Teaching Safety, is primarily designed to provide additional background materials for teaching courses in general safety, driver education, and school-shop safety. Included in the course are such units as the philosophy and scope of safety education in the public-school program, source materials for safety education, selection of materials for use in the program, methods of teaching safety, and the evaluation of the school safety program. Although the major emphasis is on the general approach to community and public-school safety problems, nevertheless opportunity is also provided for students to work on individual problems of special interest in their teaching situations.

The course, Driver Education, is offered each semester as well as during the eight-weeks' summer session. Driver education as taught on the semester or summer basis has many advantages over the intensive five-day in-service programs offered by many institutions. The program of both plans gives the prospective teachers of driver education instruction in proper scheduling, grade placement, accrediting, placement of the course in the curriculum, and other administrative problems. Text and supplementary materials are presented and techniques for developing them are discussed. The use of audio-visual aids and the psycho-physical tests, which are very effective in this area, is stressed. Projects and units designed for future use in the teacher's own classroom are assigned and developed. Methods of evaluating and testing the program are presented.

In addition to these phases of driver education, the semester or summer program at Illinois State Normal University provides an opportunity for the prospective teacher to administer the phycho-physical tests, give behind-the-wheel instruction, and administer road-skill tests to students who are just learning to drive. There is no substitute for a real teaching situation.

The worth of well-trained teachers in bringing safety into the high schools cannot be fully estimated. The results of only one phase of safety education—driver education—prove the effectiveness of trained teachers. Studies in many states—Arizona, Delaware, Massachusetts, Ohio, and others—give abundant evidence that effective driver-education courses in the high schools reduce fatal accidents and traffic violations for the high-school drivers. This fact alone makes the safety-education program worth encouraging in all schools.

INSTRUCTIONAL AIDS IN INDUSTRIAL ARTS

CHARLES B. PORTER*

Within recent years the emphasis in education has been placed more distinctly on teaching general principles and concepts which have direct bearing on the individual's everyday life and upon his future life as a citizen in a democratic society. No longer are all students required to memorize a fixed body of facts for later recitation and possible use.

During one period in the history of the emerging industrial-arts philosophy of education, it was thought that all students should learn to make wood joints by making wood joints. This method appeared sound psychologically. However, it completely omitted one important ingredient—student interest. Making wood joints for no apparent purpose somehow failed to captivate the interest and imagination of most healthy and active youngsters of the day.

Today, young people are still taught how to make wood joints by having them produce wood joints—but these joints are different. They are an important part of some interest-provoking project such as a bookcase, a coffee table, a lamp, or some other article that will continue to be of value to the individual long after he has profited from the instructional value of producing it. Thus, the project becomes a meaningful whole, through which the student learns a series of related operations and facts. This concept of instruction has expanded to the point where many of the things that are taught in industrial arts reach far beyond the confines of the shop into the community, the state, the nation, and even the world.

In order to carry on this type of instruction, the industrial-arts teacher must make effective use of the so-called audio-visual aids. Unfortunately, the term *audio-visual aids* brings to the minds of most individuals a mental picture of films, projectors, and projection screens. It is true that the medium of film may bring the mountain to Mohammed. Equally important however, and unfortunately less emphasized is the well-executed blackboard sketch, the working model, and the well-planned field trip.

It should be understood that the best learning situation exists when the student is permitted to work with the actual material or process involved in the instructional unit. Many times, however, when circumstances are such that opportunity for this type of instruction does not exist, instructional aids must be used. This is true when trying to teach an intangible or abstract idea such as electron flow through

* Instructor in Industrial Arts

a conductor. In most cases, the use of an instructional device to support the teacher's verbal explanation will assist the student in gaining a workable concept.

The use of large- and small-scale models may in many instances clarify things. Charts, graphs, pictures, mock-ups, displays, and other devices can be effectively used to show relationships, establish standards of craftsmanship, indicate correct sequence of operations for a given job, and show the materials of construction of various products and projects.

Properly used instructional aids will assist the student in learning more quickly and in retaining longer many difficult ideas and concepts. It should be pointed out that instructional aids cannot be self-contained teaching devices but rather are effective only as *aids* to instruction. This fact implies that instructional aids are useful and effective only when they are used to effect the accomplishment of accepted objectives in a carefully planned program.

The alert industrial-arts teacher should become familiar with many forms of instructional aids and their uses in assisting the student to gain broad concepts and understandings. The industrial-arts teacher should learn to produce effective instructional aids such as large- and small-scale models, working models that more clearly illustrate a given principle, well-executed blackboard sketches that help to clarify verbal descriptions, charts, graphs, tables and the like. The successful industrial-arts teacher should know where to obtain free and inexpensive instructional aids that are produced and distributed by manufacturing concerns. Too, the industrial-arts teacher should learn to recognize the situations in which instructional devices would be effective and those in which such a device would serve no useful purpose.

EXTRACURRICULAR ACTIVITIES OF THE INDUSTRIAL-ARTS DEPARTMENT

MAX L. HONN*

Extracurricular activities in the industrial-arts department at Illinois State Normal University are now in their thirtieth year. The Industrial Arts Club, the older of the two industrial-arts education groups, was organized during the 1922-23 school year by A. C. Newell, then head of the department, and a small group of industrial-arts majors. The stated purpose of the Club was "to promote a closer feeling among students majoring in industrial arts and to further their professional interests and attitudes." Fom the minutes of the early meetings it is evident that considerable effort was expended in the attempt to achieve these goals. Local craftsmen and experienced teachers spoke before the group. Social functions also formed a part of the activities from time to time. Membership was open to all students majoring in the department; the head of the department sponsored the group. Other faculty members also took part in the activities of the Club.

From its beginnings, the Industrial Arts Club has had a steady increase with the exception of the World War II years. In addition to its departmental activities, the Club participated in other University activities. The minutes record rather regular entries in Homecoming activities—floats, house decorations, and decorations for the dances —and a full share of prizes won. As the result of particular skills acquired by some members of the Club following the establishment of the University Press, ventures in the field of publication were undertaken by the group. At various times the Club published Homecoming programs, the University Student Directory, and an Industrial Arts Handbook. The success of these ventures is attested to by the mounting balance recorded in the treasurer's reports.

With the return of the men to the campus following World War II, the Industrial Arts Club entered new phases of activity. Membership was opened to minors in industrial arts as well as to majors. The sponsor was chosen from the faculty by vote of the Club members. Meetings were held according to a regular schedule set up by the Student Activities Board of the University. During the 1951-52 school year, the Club affiliated with the American Industrial Arts Association.

For the past six years the Club has sponsored a trip to a state or national convention of an Industrial Arts or Vocational Education Association. Chartered transportation, paid for in part by the Club, has made it possible for members to attend these conventions for a nominal sum. Attendance at general and sectional meetings has been

* Instructor in Printing

encouraged. The sponsor and other faculty members have provided as many opportunities as possible for members to meet leaders and experienced teachers in the field. Students have also been encouraged to visit the professional exhibits, become acquainted with the exhibitors and salesmen, and take advantage of various educational aids given away by these exhibitors.

Four years ago the Industrial Arts Club Scholarship was established. This scholarship is awarded annually to a junior member of the Club to be in effect during his senior year. It covers all fees and is intended as a means of assisting an outstanding student during the period of his student teaching. The award is based on need of the applicant, Industrial Arts Club and other extracurricular activities, and scholarship. The award is made by a committee of faculty members and Club members, who are elected annually.

Most recent of the professional projects of the Club has been the sponsorship of an Industrial Arts Round-Up. Begun in 1951, this one-day meeting is designed for the interest and improvement of industrial-arts teachers within a radius of fifty miles from Illinois State Normal University. The program has consisted of a morning session, featuring a panel-discussion group, and a noon luncheon, followed by a speaker of national reputation in the field. Members of the panels have been experienced teachers and vital topics have been chosen. Participation in the discussion periods has been lively. Speakers at the luncheon meetings have included Dr. Thomas Hippaka of Iowa State University and Dr. Fred J. Schmidt of Ball State Teachers College, Muncie, Indiana. An added feature the past year was a competition for high-school industrial-arts students. Cash prizes were awarded for winning projects accompanied by adequate plans. Since considerable interest on the part of high-school students and their teachers was shown, the competition will probably be a regular feature of the Round-Up in the future.

The sociability approved by the founders of the Industrial Arts Club has not been neglected by the present members. Each year the Club holds a banquet for all members and their wives or friends and faculty and wives. Speakers from the industrial-arts and related fields have been featured at the banquets. A summer picnic or fish fry has also been a Club-sponsored project. Partial expenses of the social gatherings have been met by the Club, thus bringing these affairs within the means of all members.

The Industrial Arts Club has an annual service project, which makes possible the various activities of the Club. The publication of the University Student Directory is underwritten by the Club each autumn. Committees are set up at a late spring meeting to take care of the solicitation of advertising and the supervision of the printing of the advertising pages. Other committees are responsible for the alphabetizing and typing of the student and faculty directory pages. Printing is done by a commercial firm. Every effort is made to bring out the directory during the first month of school. Members of the

Club handle the sales. It is felt that the participation of the members in this project provides them with experiences which will prove of value during their teaching careers.

Rho chapter of Iota Lambda Sigma, national honorary professional industrial-education fraternity, was installed on the campus of Illinois State Normal University in May, 1950. That this chapter was only the second one granted to a teacher-training college is a matter of reasonable pride here. The purpose of the fraternity is the promotion of industrial education and includes both industrial-arts education and vocational education. Membership is based on scholarship and professional activity. Requirements are such that a student is seldom eligible for membership before his junior year. Included in the membership are undergraduates, graduates, and faculty, thus providing a definite tie between the campus group and the graduates in the field. Continuing membership on the part of the graduates provides an opportunity for more effective follow-up and placement service. Meetings of Iota Lambda Sigma are usually professional in nature and are held less frequently than those of the Industrial Arts Club. Joint meetings are held occasionally. Highlight of the school year for Iota Lambda Sigma is the annual formal initiation. The social activity of the fraternity is the joint sponsorship of a coffee-and-doughnut reception for alumni at Homecoming.

The industrial-arts department recognizes that many benefits to the students are to be derived from participation in both the professional and social activities of these extra-curricular groups. Membership and participation are encouraged for all students in the department. Every effort is made to keep the expense of membership to a minimum so that all who will may join in the activities of the Industrial Arts Club and Iota Lambda Sigma.

PROFESSIONAL ACTIVITIES OF THE FACULTY

Dr. Norma M. Leavitt, associate professor of health and physical education, has an article on "Techniques of Umpiring Speedball" in the *Official Soccer-Speedball Guide 1952-1954*, published for the National Section on Women's Athletics by the American Association for Health, Physical Education, and Recreation.

Dr. Ella C. Leppert, associate professor of social science, talked to the Local Council for the Social Studies in Bloomington, March 15, on "Difficulties Teachers Encounter in Problem-Centered Teaching." She served as consultant on the Social Studies Curriculum at the Workshop for Administrators sponsored by the Illinois Curriculum Program, at Pere Marquette State Park, March 26-28. She was a member of the Jury for Consensus Study on Citizenship, also sponsored by the Illinois Curriculum Program in Urbana, April 7 and May 5. As state board member and representative to the Steering Committee of the Illinois Curriculum Program, she attended a meeting of the Illinois Council for the Social Studies at Aurora, on April 19.

Dr. Harry D. Lovelass, professor of psychology and principal of the University High School, served as discussion leader for the section on "Personnel Problems of the Junior College" on Wednesday, June 18, Thursday, June 19, and Friday, June 20, at the Junior College Conference on the Illinois State Normal University campus. He participated in the pre-planning conference of the Clinton Public Schools, Clinton, Iowa, on Thursday, August 28, 1952. He spoke on the topics, "How Best to Meet Individual Needs of Students in the Classroom," and "How Can We Develop in Students the Sense of Responsibility and Proper Attitude Toward Life's Values?"

Dr. Stanley S. Marzolf, professor of psychology, participated in a symposium on the legal aspects of psychology at Northwestern University on June 7. This symposium was sponsored by the Department of Psychology of Northwestern University.

Dr. Stanley K. Norton, associate professor of education and assistant dean of men, spoke on May 5 to the Piper City Parent Teachers Association on the topic, "Better Living Through Basic Educational Changes."

Leslie D. Park, instructor and supervising teacher in health and physical education, is the author of an article, "Public Relations and Your Physical Education Program," appearing in the summer edition of *Illinois Physical Education News*, published by the Illinois Association for Health, Physical Education, and Recreation.

Dr. Rose E. Parker, director of the division of special education, spoke on the subject, "Teacher Education for Exceptional Children," at an Insitute held by the Eleventh District of Junior Woman's Clubs at Wheaton, Illinois, June 5.

Dr. T. E. Rine, assistant professor of mathematics, has published on microfilm his dissertation for the Ph.D. degree, *Criteria for Self-evaluation of Programs of Student Teaching in Secondary School Mathematics*. This is another of the Contributions to Education, George Peabody College for Teachers, Nashville, Tennessee, June, 1952.

Ethel Stein, assistant professor and supervising teacher in the eighth grade, was elected president of the Junior High School Association of Illinois to serve from March 29, 1952, to March 28, 1953.

Dr. Lucy Lucile Tasher, associate professor of social science, represents International Relations on the local board of the American Association of University

Women for the coming year, 1952-1953.

Dr. Lewis R. Toll, director of the division of business education, has been appointed to serve on the Steering Committee of the Illinois Curriculum Program as the member representing the Illinois Business Teachers Association. On June 26 and 27 he attended the Board of Directors meeting of the National Business Teachers Association, Congress Hotel, Chicago, to make plans for the annual convention.

Dr. Bjarne R. Ullsvik, administrative assistant to the president, was conference speaker at the Mathematics Conference held on July 17 at Syracuse University, Syracuse, New York. He spoke at the morning session on "Teaching for Critical Thinking" and at the afternoon session on "Evaluating Critical Thinking."

Dr. Helen Cavanagh, associate professor of social science, attended the Mississippi Valley Historical Association meeting at Chicago, April 21-23. She is the author of *Funk of Funk's Grove, Farmer, Legislator, and Cattle King of the Old Northwest, 1797-1865,* published by the Pantagraph Publishing Company of Bloomington in 1952.

Dr. Claude M. Dillinger, professor of psychology, talked to the staff of the Girl Scout Camp at Lake Bloomington Thursday night, June 19, about problems which arise in camping.

Dr. Ruth M. Freyberger, associate professor of art, wrote an article, "Second Graders Paint the News," which appeared in the June issue of *Junior Arts and Activities.*

Dr. F. Lincoln D. Holmes, director of the division of speech, attended the Central States Speech Association spring meeting in Tulsa, Oklahoma, April 18 and 19.

Verna A. Hoyman, assistant professor of English, was Planning Week Workshop Consultant for the Austin Public Schools, Austin, Minnesota, on August 25-27. She was recently initiated at the University of Minnesota into Pi Lambda Theta, and into Delta Phi Lambda, a creative-writing honorary fraternity.

Dr. Helen E. Marshall, professor of social science, directed the Social Science Summer Conference on the Illinois State Normal University campus, June 24-26. Eight off-campus speakers participated, among them former Governor Robert D. Blue of Iowa, and John Cates of the State Department.

Dr. Leslie M. Isted, associate professor of music, gave a series of lectures on "The Measurement of Vocal Tone" for a meeting of the National Association of Teachers of Singing, held at Indiana University, June 22-25.

Howard J. Ivens, assistant professor of physical science, spoke at the State Meeting of the Michigan Audio-Visual Association at Ann Arbor, Michigan, on May 9. His subject was "Preparation and Use of Selected Materials in Audio-Visual Instruction."

Dr. Gertrude M. Hall, director of publicity, was on leave during the month of July while carrying out a special public-relations assignment for Teachers College, Columbia University. As chairman of the joint committee on public relations of the American College Public Relations Association and the American Association of Colleges for Teacher Education, she assisted with the School for Executives sponsored by the latter organization at Ypsilanti, Michigan, August 17-23.

Dr. Arlan C. Helgeson, assistant professor of social science, read a paper on "Nineteenth-Century Land Colonization in Northern Wisconsin" at the annual convention of the Wisconsin State Historical Society, June 7. The convention was held this year at Eagle River, Wisconsin.

Leland E. Hess, assistant professor of social science, received a Fellowship from the Foundation for Economic Education,

Irvington-on-the-Hudson. This involved a month's study of the operation of industry at close range in the plant of the Caterpillar Corporation, Peoria, Illinois. He was appointed chairman of the Audio-Visual Committee of the Illinois Council for Social Studies, and has become a member of the Audio-Visual Committee of the National Council for Social Studies.

Dr. F. Louis Hoover, director of the division of art education, was in New York City on June 4, serving on the National Jury of awards for the National Soap Sculpture Contest. It was the Silver Anniversary of this organization. At a dinner celebrating the event, each of the twelve jurors was presented with a large Towle sterling silver bowl appropriately engraved.

Dr. Victor M. Houston, director of the division of secondary education and head of the department of education and psychology, has resigned his position at Illinois State Normal University, effective August 31, 1952, to become Director of the Division of Education and Psychology and Director of Summer Programs, Chico State College, Chico, California, effective September 1, 1952.

Dr. Cecilia J. Lauby, associate professor and coordinator of off-campus student teaching, spoke to the Advisory Committee on Education in Illinois on "Teachers Working with Lay Groups." This meeting was held at the Congress Hotel, Chicago, Illinois, on June 13. She presented a paper June 28 at the Reading Conference at Chicago University, Chicago, Illinois. The title of the paper, which will be publiched in the *Procedings* of the Reading Conference, is "Methods of Promoting Readiness for, and Increasing Competence in Interpreting Social Studies Materials." From August 11-22 she conducted a workshop at Kankakee, Illinois, under the sponsorship of Ruell Hall, Superintendent of Schools, Kankakee County. The workshop stressed "Child Growth and Development."